

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,841	08/06/2004	Masuhiro Natsuhara	039.0053	4840
29453	7590 06/15/2007	EXAMINER		
JUDGE & MURAKAMI IP ASSOCIATES DOJIMIA BUILDING, 7TH FLOOR			KACKAR, RAM N	
	6-8 NISHITEMMA 2-CHOME, KITA-KU OSAKA-SHI, 530-0047		ART UNIT	PAPER NUMBER
JAPAN			1763	
		•		
			MAIL DATE	DELIVERY MODE
		•	06/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/710,841	NATSUHARA ET AL.			
		Examiner	Art Unit			
		Ram N. Kackar	1763			
Period fo	The MAILING DATE of this communication app	ears on the cover sheet with the	correspondence address			
A SH WHIC - Exter after - If NC - Failu	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DA nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be to the apply and will expire SIX (6) MONTHS from the application to become ABANDON	DN. timely filed m the mailing date of this communication. IED (35 U.S.C. § 133).			
Status	ed patent term adjustment. See 37 CFR 1.704(b).					
_	Perpansive to communication(s) filed on 4/00/	2007 ·				
·	Responsive to communication(s) filed on <u>4/23/2007</u> . This action is FINAL. 2b) This action is non-final.					
_	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
ت(د	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dienositi	on of Claims					
		•				
5)□ 6)⊠ 7)□	Claim(s) <u>1 and 6</u> is/are pending in the application 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) <u>1 and 6</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.	,			
Applicati	on Papers					
9)[The specification is objected to by the Examiner	r. ·				
10)	The drawing(s) filed on is/are: a) acce	epted or b) objected to by the	Examiner.			
	Applicant may not request that any objection to the o					
11) 🗌 .	Replacement drawing sheet(s) including the correction. The oath or declaration is objected to by the Example 1.					
Priority u	inder 35 U.S.C. § 119					
12)⊠ <i>i</i> a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau tee the attached detailed Office action for a list of	s have been received. s have been received in Applicative documents have been received (PCT Rule 17.2(a)).	tion No ved in this National Stage			
2) 🔲 Notice 3) 🔯 Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date 11/1/06.	4) Interview Summan Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	Date			

Application/Control Number: 10/710,841

Art Unit: 1763

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

 (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukuda et al (JP 10237658).

Fukuda et al disclose a semiconductor processing device comprising a vertically movable pedestal, support pieces mounted to pedestal (abstract and Fig 1), a hermetic bellows seal between pedestal and chamber (32) and lift pins to load /unload substrates (27). The lift pin are disclosed attached to the process chamber floor and do not move during load/unload. The bellows are outside the chamber.

3. Claims 1 and 6 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sang-Gee Park (US Pub 2002/0174950).

Sang-Gee Park discloses a semiconductor processing device comprising a vertically movable pedestal, support pieces mounted to pedestal (Fig 4), a hermetic bellows seal between pedestal and chamber (21) and lift pins to load /unload substrates (60). The lift pin are disclosed attached to the process chamber floor and do not move during load/unload. The bellows are

Application/Control Number: 10/710,841

Art Unit: 1763

outside the chamber. The lower end of the lift pins could be screwed to a support fixed with respect to the chamber (61 and paragraph 33).

4. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Benzing et al (US 5405480).

Benzing discloses a semiconductor processing device comprising a vertically movable pedestal, support pieces mounted to pedestal (Fig 1), a hermetic bellows seal between pedestal and chamber (52) and lift pins to load /unload substrates (54, 56). The lift pin are disclosed fixed to the process chamber floor and do not move during load/unload.

Regarding claim 6 at least some part of the bellows are outside the chamber.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al (US 20030029568).

Brown et al disclose a semiconductor processing device comprising a vertically movable pedestal, support pieces mounted to pedestal (Fig 2), a hermetic bellows seal between pedestal and chamber (252) and lift pins to load /unload substrates (290). The lift pin are disclosed resting

Application/Control Number: 10/710,841

Art Unit: 1763

on a structure which is fixed to the process chamber and do not move during load/unload. It is not disclosed if they are anchored to the chamber. However, since they are fixed with respect to the chamber they could obviously be anchored.

Response to Arguments

7. Applicant's arguments filed 4/23/2007 have been fully considered but they are moot in view of new grounds of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ram N. Kackar whose telephone number is 571 272 1436. The examiner can normally be reached on M-F 8:00 A.M to 5:P.M.

Art Unit: 1763

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571 272 1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kans

Ram Kackar Primary Examiner AU 1763 Substitute for form PTO/SB/08A

IDS LIST OF REFERENCES UNDER 37 C. F. R. 1.98

Sheet

1 of Application Number: 10/710,841

Filing Date:

August 06, 2004

First Named Inventor:

Masuhiro Natsuhara

Art Unit:

1763

Examiner Name:

Ram N. Kackar

Docket Number:

039.0053

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T
V	F1	JP-H10-237658-A	09-08-1998	Frontec		
V	F2	JP-2003-007622-A	01-10-2003	Hitachi Kokusai Electric		Ø
~	F3	JP-H10-004085-A	01-06-1998	Sony		
~	F4	JP-H05-009740-A	01-19-1993	NGK Insulators	,	Ø
	F5	JP-H04-078138-A	03-12-1992	NGK insulators		V

Examiner Signature Considered 6	-8-07
---------------------------------	-------